



Attachment A

1. (Twice Amended) A method for mounting an optical subassembly of an optical reading device to an image sensor subassembly of an optical device, said method comprising the steps of:

moving said optical subassembly and said image sensor subassembly in proximity with one another; and

soldering said optical and image sensor [assemblies] subassemblies together using a solder material, wherein at the time of said soldering step there is no contact between said optical subassembly and said image sensor subassembly that prevents free movement of said optical subassembly and said image sensor subassembly in either of a vertical or a horizontal direction.

26. (Twice Amended) An image sensor subassembly comprising:
a substantially rigid member;
an image sensor chip disposed on said substantially rigid member;
a solderable surface formed on said substantially rigid member, said solderable surface being of a configuration selected from the group consisting of a hole or pin for receiving in surrounding but not engaging relationship a corresponding pin [o] or hole; and a solder material disposed between said hole or pin and said pin or hole.

30. (Amended) The method of claim 17, wherein said moving step includes the step of aligning optical elements of said optical [assembly] subassembly with imaging elements of said image sensor [assembly] subassembly.

31. (Amended) The method of claim 17, wherein said aligning step includes the steps of:

exposing said image sensor [assembly] subassembly to a predetermined test target; and

observing indicia representing electrical signals generated by said image sensor.

38. (Amended) The image sensor subassembly of claim 33, wherein said [at least one] solderable surface[s] includes four solderable surfaces formed about a periphery of said image sensor.

44. (Amended) The optical subassembly of claim 40, wherein said [at least one] solderable surface[s] includes four solderable surfaces formed about a periphery of said image sensor.

48. (Twice Amended) The method of claim 46, further comprising the step of forming a solderable surface on at least one of said optical [assembly] subassembly or said image sensor [assembly] subassembly, wherein said forming step includes the step of overmolding non-solderable material onto solderable material to form said solderable surface, and wherein said securing step includes the step of soldering said optical subassembly and said image sensor subassembly together using a solder material.

95. (Twice Amended) A method for mounting an optical subassembly of an optical reading or imaging device to an image sensor subassembly of an optical reading or imaging device, said method comprising the steps of:

moving said optical subassembly and said image sensor subassembly in proximity with one another;

aligning said optical subassembly with said image sensor subassembly; and

without a portion of said image sensor subassembly being in contact with a portion of said optical subassembly, soldering said optical subassembly and said image sensor [assembly] subassembly together using a solder material.



Attachment B

1. (Twice Amended) A method for mounting an optical subassembly of an optical reading device to an image sensor subassembly of an optical device, said method comprising the steps of:

moving said optical subassembly and said image sensor subassembly in proximity with one another; and

soldering said optical and image sensor subassemblies together using a solder material, wherein at the time of said soldering step there is no contact between said optical subassembly and said image sensor subassembly that prevents free movement of said optical subassembly and said image sensor subassembly in either of a vertical or a horizontal direction.

26. (Twice Amended) An image sensor subassembly comprising:
a substantially rigid member;
an image sensor chip disposed on said substantially rigid member;
a solderable surface formed on said substantially rigid member, said solderable surface being of a configuration selected from the group consisting of a hole or pin for receiving in surrounding but not engaging relationship a corresponding pin or hole; and a solder material disposed between said hole or pin and said pin or hole.

30. (Amended) The method of claim 17, wherein said moving step includes the step of aligning optical elements of said optical subassembly with imaging elements of said image sensor subassembly.

31. (Amended) The method of claim 17, wherein said aligning step includes the steps of:

exposing said image sensor subassembly to a predetermined test target; and
observing indicia representing electrical signals generated by said image sensor.

38. (Amended) The image sensor subassembly of claim 33, wherein said solderable surface includes four solderable surfaces formed about a periphery of said image sensor.

44. (Amended) The optical subassembly of claim 40, wherein said solderable surface includes four solderable surfaces formed about a periphery of said image sensor.

48. (Twice Amended) The method of claim 46, further comprising the step of forming a solderable surface on at least one of said optical subassembly or said image sensor subassembly, wherein said forming step includes the step of overmolding non-solderable material onto solderable material to form said solderable surface, and wherein said securing step includes the step of soldering said optical subassembly and said image sensor subassembly together using a solder material.

95. (Twice Amended) A method for mounting an optical subassembly of an optical reading or imaging device to an image sensor subassembly of an optical reading or imaging device, said method comprising the steps of:

moving said optical subassembly and said image sensor subassembly in proximity with one another;

aligning said optical subassembly with said image sensor subassembly; and

without a portion of said image sensor subassembly being in contact with a portion of said optical subassembly, soldering said optical subassembly and said image sensor subassembly together using a solder material.

Attachment C

31. The method of claim 17, wherein said aligning step includes the steps of:

exposing said image sensor assembly to a predetermined test target; and
observing indicia representing electrical signals generated by said image sensor.

Attachment D

82. The device of claim 79, wherein said at least one solderable surface is made in an irregular configuration having an increased surface area per unit three dimensional space relative to that of a smooth surface.